Kup-Sze Choi

List of Publications by Year
in descending order

140 papers	3,564 citations	172386 29 h-index	155592 55 g-index
145 all docs	145 docs citations	145 times ranked	3237 citing authors

#	ARTICLE	IF	CITATIONS
1	Heartbeat classification using disease-specific feature selection. Computers in Biology and Medicine, 2014, 46, 79-89.	3.9	282
2	Generalized Hidden-Mapping Ridge Regression, Knowledge-Leveraged Inductive Transfer Learning for Neural Networks, Fuzzy Systems and Kernel Methods. IEEE Transactions on Cybernetics, 2014, 44, 2585-2599.	6.2	179
3	Seizure Classification From EEG Signals Using Transfer Learning, Semi-Supervised Learning and TSK Fuzzy System. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 2270-2284.	2.7	179
4	Enhanced soft subspace clustering integrating within-cluster and between-cluster information. Pattern Recognition, 2010, 43, 767-781.	5.1	178
5	Recognition of Epileptic EEG Signals Using a Novel Multiview TSK Fuzzy System. IEEE Transactions on Fuzzy Systems, 2017, 25, 3-20.	6.5	157
6	Knowledge-Leverage-Based TSK Fuzzy System Modeling. IEEE Transactions on Neural Networks and Learning Systems, 2013, 24, 1200-1212.	7.2	113
7	Scalable TSK Fuzzy Modeling for Very Large Datasets Using Minimal-Enclosing-Ball Approximation. IEEE Transactions on Fuzzy Systems, 2011, 19, 210-226.	6.5	112
8	Deep Multi-View Feature Learning for EEG-Based Epileptic Seizure Detection. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1962-1972.	2.7	109
9	A survey on soft subspace clustering. Information Sciences, 2016, 348, 84-106.	4.0	92
10	Transfer Prototype-Based Fuzzy Clustering. IEEE Transactions on Fuzzy Systems, 2016, 24, 1210-1232.	6.5	88
11	Alternatives to relational database: Comparison of NoSQL and XML approaches for clinical data storage. Computer Methods and Programs in Biomedicine, 2013, 110, 99-109.	2.6	83
12	A virtual training simulator for learning cataract surgery with phacoemulsification. Computers in Biology and Medicine, 2009, 39, 1020-1031.	3.9	75
13	Prediction of mortality after radical cystectomy for bladder cancer by machine learning techniques. Computers in Biology and Medicine, 2015, 63, 124-132.	3.9	71
14	Transductive Joint-Knowledge-Transfer TSK FS for Recognition of Epileptic EEG Signals. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 1481-1494.	2.7	67
15	Takagiâ€"Sugenoâ€"Kang Transfer Learning Fuzzy Logic System for the Adaptive Recognition of Epileptic Electroencephalogram Signals. IEEE Transactions on Fuzzy Systems, 2016, 24, 1079-1094.	6.5	66
16	T2FELA: Type-2 Fuzzy Extreme Learning Algorithm for Fast Training of Interval Type-2 TSK Fuzzy Logic System. IEEE Transactions on Neural Networks and Learning Systems, 2014, 25, 664-676.	7.2	62
17	Distance metric learning for soft subspace clustering in composite kernel space. Pattern Recognition, 2016, 52, 113-134.	5.1	61
18	Improving the discrimination of hand motor imagery via virtual reality based visual guidance. Computer Methods and Programs in Biomedicine, 2016, 132, 63-74.	2.6	54

#	Article	IF	Citations
19	Learning Blood Management in Orthopedic Surgery through Gameplay. IEEE Computer Graphics and Applications, 2010, 30, 45-57.	1.0	53
20	Effects of an mHealth Brisk Walking Intervention on Increasing Physical Activity in Older People With Cognitive Frailty: Pilot Randomized Controlled Trial. JMIR MHealth and UHealth, 2020, 8, e16596.	1.8	52
21	Generalized Hidden-Mapping Transductive Transfer Learning for Recognition of Epileptic Electroencephalogram Signals. IEEE Transactions on Cybernetics, 2019, 49, 2200-2214.	6.2	49
22	Local and Global Structure-Aware Entropy Regularized Mean Teacher Model for 3D Left Atrium Segmentation. Lecture Notes in Computer Science, 2020, , 562-571.	1.0	48
23	Interactive deformation of soft tissues with haptic feedback for medical learning. IEEE Transactions on Information Technology in Biomedicine, 2003, 7, 358-363.	3.6	44
24	Detection of epilepsy with Electroencephalogram using rule-based classifiers. Neurocomputing, 2017, 228, 283-290.	3.5	43
25	Network Together: Node Classification via Cross-Network Deep Network Embedding. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 1935-1948.	7.2	42
26	Deep Additive Least Squares Support Vector Machines for Classification With Model Transfer. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 1527-1540.	5.9	41
27	Transductive domain adaptive learning for epileptic electroencephalogram recognition. Artificial Intelligence in Medicine, 2014, 62, 165-177.	3.8	39
28	A Transfer-Based Additive LS-SVM Classifier for Handling Missing Data. IEEE Transactions on Cybernetics, 2020, 50, 739-752.	6.2	38
29	Adversarial Deep Network Embedding for Cross-Network Node Classification. Proceedings of the AAAI Conference on Artificial Intelligence, 2020, 34, 2991-2999.	3.6	38
30	Using Interactive Computer Simulation for Teaching the Proper Use of Personal Protective Equipment. CIN - Computers Informatics Nursing, 2015, 33, 49-57.	0.3	32
31	An efficient and scalable deformable model for virtual reality-based medical applications. Artificial Intelligence in Medicine, 2004, 32, 51-69.	3.8	30
32	Concise Fuzzy System Modeling Integrating Soft Subspace Clustering and Sparse Learning. IEEE Transactions on Fuzzy Systems, 2019, 27, 2176-2189.	6.5	29
33	Maximum likelihood-based extended Kalman filter for COVID-19 prediction. Chaos, Solitons and Fractals, 2021, 146, 110922.	2.5	29
34	Walking Imagery Evaluation in Brain Computer Interfaces via a Multi-View Multi-Level Deep Polynomial Network. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 497-506.	2.7	27
35	Tackling Missing Data in Community Health Studies Using Additive LS-SVM Classifier. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 579-587.	3.9	26
36	Data-Driven Elastic Fuzzy Logic System Modeling: Constructing a Concise System With Human-Like Inference Mechanism. IEEE Transactions on Fuzzy Systems, 2018, 26, 2160-2173.	6.5	25

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37	Transfer Representation Learning With TSK Fuzzy System. IEEE Transactions on Fuzzy Systems, 2021, 29, 649-663.	6.5	25
38	A virtual reality based simulator for learning nasogastric tube placement. Computers in Biology and Medicine, 2015, 57, 103-115.	3.9	24
39	Enhanced Knowledge-Leverage-Based TSK Fuzzy System Modeling for Inductive Transfer Learning. ACM Transactions on Intelligent Systems and Technology, 2017, 8, 1-21.	2.9	24
40	Extended Kalman filter based on stochastic epidemiological model for COVID-19 modelling. Computers in Biology and Medicine, 2021, 137, 104810.	3.9	24
41	Deformable simulation using force propagation model with finite element optimization. Computers and Graphics, 2004, 28, 559-568.	1.4	22
42	Virtual Suturing Simulation Based on Commodity Physics Engine for Medical Learning. Journal of Medical Systems, 2012, 36, 1781-1793.	2.2	22
43	A Deep-Ensemble-Level-Based Interpretable Takagiâ€"Sugenoâ€"Kang Fuzzy Classifier for Imbalanced Data. IEEE Transactions on Cybernetics, 2022, 52, 3805-3818.	6.2	22
44	Fast feature-preserving speckle reduction for ultrasound images via phase congruency. Signal Processing, 2017, 134, 275-284.	2.1	21
45	EEW-SC: Enhanced Entropy-Weighting Subspace Clustering for high dimensional gene expression data clustering analysis. Applied Soft Computing Journal, 2011, 11, 4798-4806.	4.1	20
46	Discrimination of motor imagery tasks via information flow pattern of brain connectivity. Technology and Health Care, 2016, 24, S795-S801.	0.5	19
47	Output based transfer learning with least squares support vector machine and its application in bladder cancer prognosis. Neurocomputing, 2020, 387, 279-292.	3.5	19
48	Deep stacked support matrix machine based representation learning for motor imagery EEG classification. Computer Methods and Programs in Biomedicine, 2020, 193, 105466.	2.6	19
49	Fast Rendering of Diffusion Curves with Triangles. IEEE Computer Graphics and Applications, 2012, 32, 68-78.	1.0	18
50	Minimumâ€"maximum local structure information for feature selection. Pattern Recognition Letters, 2013, 34, 527-535.	2.6	18
51	Segmentation of Overlapping Cytoplasm in Cervical Smear Images via Adaptive Shape Priors Extracted From Contour Fragments. IEEE Transactions on Medical Imaging, 2019, 38, 2849-2862.	5.4	17
52	Extended Kalman Filter Nonlinear Finite Element Method for Nonlinear Soft Tissue Deformation. Computer Methods and Programs in Biomedicine, 2021, 200, 105828.	2.6	17
53	Enhancement of prostate cancer diagnosis by machine learning techniques: an algorithm development and validation study. Prostate Cancer and Prostatic Diseases, 2022, 25, 672-676.	2.0	17
54	Convex nonnegative matrix factorization with manifold regularization. Neural Networks, 2015, 63, 94-103.	3.3	16

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55	Extended Kalman filter for online soft tissue characterization based on Hunt-Crossley contact model. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 123, 104667.	1.5	16
56	A novel multi-task TSK fuzzy classifier and its enhanced version for labeling-risk-aware multi-task classification. Information Sciences, 2016, 357, 39-60.	4.0	15
57	Diagnosis of prostate cancer in a Chinese population by using machine learning methods. , 2018, 2018, 1-4.		15
58	CNN in CT Image Segmentation: Beyond Loss Function for Exploiting Ground Truth Images. , 2020, , .		15
59	Multi-View Clustering With the Cooperation of Visible and Hidden Views. IEEE Transactions on Knowledge and Data Engineering, 2022, 34, 803-815.	4.0	15
60	Interactive cutting of deformable objects using force propagation approach and digital design analogy. Computers and Graphics, 2006, 30, 233-243.	1.4	14
61	A hand rehabilitation system with force feedback for children with cerebral palsy: two case studies. Disability and Rehabilitation, 2011, 33, 1704-1714.	0.9	14
62	Fast Gabor texture feature extraction with separable filters using GPU. Journal of Real-Time Image Processing, 2016, 12, 5-13.	2.2	14
63	Synchronization clustering based on central force optimization and its extension for large-scale datasets. Knowledge-Based Systems, 2017, 118, 31-44.	4.0	14
64	Virtual Reality Wound Care Training for Clinical Nursing Education: An Initial User Study. , 2019, , .		13
65	Using computer-assisted method to teach children with intellectual disabilities handwashing skills. Disability and Rehabilitation: Assistive Technology, 2012, 7, 507-516.	1.3	12
66	Rehabilitation of activities of daily living in virtual environments with intuitive user interface and force feedback. Disability and Rehabilitation: Assistive Technology, 2017, 12, 672-680.	1.3	12
67	Reduced-Order Extended Kalman Filter for Deformable Tissue Simulation. Journal of the Mechanics and Physics of Solids, 2022, 158, 104696.	2.3	12
68	An extension to the discriminant analysis of near-infrared spectra. Medical Engineering and Physics, 2013, 35, 172-177.	0.8	11
69	Monotonic relation-constrained Takagi-Sugeno-Kang fuzzy system. Information Sciences, 2022, 582, 243-257.	4.0	11
70	Integrating PhysX and OpenHaptics: Efficient force feedback generation using physics engine and haptic devices. , 2009, , .		10
71	Using sequential floating forward selection algorithm to detect epileptic seizure in EEG signals. , 2012, , .		9
72	Semi-supervised learning using hidden feature augmentation. Applied Soft Computing Journal, 2017, 59, 448-461.	4.1	9

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73	Evaluation of Motor Training Performance in 3D Virtual Environment via Combining Brain-computer Interface and Haptic Feedback. Procedia Computer Science, 2017, 107, 256-261.	1.2	9
74	Least squares support vector machines with fast leave-one-out AUC optimization on imbalanced prostate cancer data. International Journal of Machine Learning and Cybernetics, 2020, 11, 1909-1922.	2.3	9
75	Robust Multi-Label Relief Feature Selection Based on Fuzzy Margin Co-Optimization. IEEE Transactions on Emerging Topics in Computational Intelligence, 2022, 6, 387-398.	3.4	9
76	A framework using cluster-based hybrid network architecture for collaborative virtual surgery. Computer Methods and Programs in Biomedicine, 2009, 96, 205-216.	2.6	8
77	Collaborative Simulation of Soft-Tissue Deformation for Virtual Surgery Applications. Journal of Medical Systems, 2010, 34, 367-378.	2.2	8
78	Detection of Epileptic Seizures in EEG Signals with Rule-Based Interpretation by Random Forest Approach. Lecture Notes in Computer Science, 2015, , 738-744.	1.0	8
79	A Computer-Based Method for Teaching Catheter-Access Hemodialysis Management. CIN - Computers Informatics Nursing, 2016, 34, 476-483.	0.3	8
80	Incomplete Multiple View Fuzzy Inference System With Missing View Imputation and Cooperative Learning. IEEE Transactions on Fuzzy Systems, 2022, 30, 3038-3051.	6.5	8
81	Enhancing training performance for brain–computer interface with object-directed 3D visual guidance. International Journal of Computer Assisted Radiology and Surgery, 2016, 11, 2129-2137.	1.7	7
82	Robust extreme learning fuzzy systems using ridge regression for small and noisy datasets. , 2017, , .		7
83	Feature-preserving ultrasound speckle reduction via L_0 minimization. Neurocomputing, 2018, 294, 48-60.	3.5	7
84	Constrained finite element method for runtime modeling of soft tissue deformation. Applied Mathematical Modelling, 2022, 109, 599-612.	2.2	7
85	Effect of Packet Loss on Collaborative Haptic Interactions in Networked Virtual Environments: An Experimental Study. Presence: Teleoperators and Virtual Environments, 2013, 22, 36-53.	0.3	6
86	Deep Cross-Output Knowledge Transfer Using Stacked-Structure Least-Squares Support Vector Machines. IEEE Transactions on Cybernetics, 2022, 52, 3207-3220.	6.2	6
87	A Novel Transfer Support Matrix Machine for Motor Imagery-Based Brain Computer Interface. Frontiers in Neuroscience, 2020, 14, 606949.	1.4	6
88	Finite-element kalman filter with state constraint for dynamic soft tissue modelling. Computers in Biology and Medicine, 2021, 135, 104594.	3.9	6
89	Multilabel Takagi-Sugeno-Kang Fuzzy System. IEEE Transactions on Fuzzy Systems, 2022, 30, 3410-3425.	6.5	6
90	Using Machine Learning to Diagnose Bacterial Sepsis in the Critically Ill Patients. Lecture Notes in Computer Science, 2017, , 223-233.	1.0	6

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91	A Rehabilitation Method with Visual and Haptic Guidance for Children with Upper Extremity Disability. Lecture Notes in Computer Science, 2010, , 77-84.	1.0	6
92	Using Dual Neural Network Architecture to Detect the Risk of Dementia With Community Health Data: Algorithm Development and Validation Study. JMIR Medical Informatics, 2020, 8, e19870.	1.3	6
93	Detecting fake images using watermarks and support vector machines. Computer Standards and Interfaces, 2008, 30, 132-136.	3.8	5
94	An output-based knowledge transfer approach and its application in bladder cancer prediction. , 2017, , .		5
95	Deep EEG feature learning via stacking common spatial pattern and support matrix machine. Biomedical Signal Processing and Control, 2022, 74, 103531.	3.5	5
96	Virtual Reality in Nursing: Nasogastric Tube Placement Training Simulator. Studies in Health Technology and Informatics, 2017, 245, 1298.	0.2	5
97	Toward realistic virtual surgical simulation: using heuristically parameterized anisotropic mass-spring model to simulate tissue mechanical responses. , 2010, , .		4
98	Using artificial neural network to predict mortality of radical cystectomy for bladder cancer. , 2014, , .		4
99	Effective user training for motor imagery based brain computer interface with object-directed 3D visual display. , 2014, , .		4
100	Stereoscopic Three-Dimensional Visualization for Immersive and Intuitive Anatomy Learning. , 2016, , .		4
101	Manifold-Regularized Multitask Fuzzy System Modeling With Low-Rank and Sparse Structures in Consequent Parameters. IEEE Transactions on Fuzzy Systems, 2022, 30, 1486-1500.	6.5	4
102	A Virtual Reality Simulator Prototype for Learning and Assessing Phaco-sculpting Skills. Lecture Notes in Computer Science, 2010, , 145-156.	1.0	4
103	Haptic Rendering in Interactive Applications Developed with Commodity Physics Engine. Journal of Multimedia, 2011, 6, .	0.3	4
104	Virtual reality simulation for learning wound dressing: Acceptance and usability. Clinical Simulation in Nursing, 2022, 68, 49-57.	1.5	4
105	Modified sequential floating selection for blood glucose monitoring using near infrared spectral data. Journal of Applied Spectroscopy, 2013, 80, 284-288.	0.3	3
106	Facilitating mathematics learning for students with upper extremity disabilities using touch-input system. Disability and Rehabilitation: Assistive Technology, 2015, 10, 170-180.	1.3	3
107	Performance Evaluation of Walking Imagery Training Based on Virtual Environment in Brain-Computer Interfaces. , 2017, , .		3
108	Usability evaluation of 3D user interface for virtual planning of bone fixation plate placement. Informatics in Medicine Unlocked, 2020, 19, 100348.	1.9	3

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109	Selective Transfer Classification Learning With Classification-Error-Based Consensus Regularization. IEEE Transactions on Emerging Topics in Computational Intelligence, 2021, 5, 178-190.	3.4	3
110	Healthcare Information System: A Facilitator of Primary Care for Underprivileged Elderly via Mobile Clinic. Lecture Notes in Computer Science, 2013, , 107-112.	1.0	3
111	Enhanced Multiview Fuzzy Clustering Using Double Visible-Hidden View Cooperation and Network LASSO Constraint. IEEE Transactions on Fuzzy Systems, 2022, 30, 4965-4979.	6.5	3
112	EEG-based vibrotactile evoked brain-computer interfaces system: A systematic review. PLoS ONE, 2022, 17, e0269001.	1.1	3
113	Packet-loss-resilient perception-based haptic data reduction and transmission using ACK packets. , 2012, , .		2
114	Using analytical force model for efficient deformation simulation and haptic rendering of soft objects. Multimedia Tools and Applications, 2015, 74, 1823-1844.	2.6	2
115	A Heuristic Force Model for Haptic Simulation of Nasogastric Tube Insertion Using Fuzzy Logic. IEEE Transactions on Haptics, 2016, 9, 295-310.	1.8	2
116	Towards Using Tiny Multi-sensors Unit for Child Care Reminders. , 2016, , .		2
117	Virtual haptic system for intuitive planning of bone fixation plate placement. Informatics in Medicine Unlocked, 2017, 9, 145-153.	1.9	2
118	JOint Shape Matching for Overlapping Cytoplasm Segmentation in Cervical Smear Images. , 2019, , .		2
119	Selective Learning from External Data for CT Image Segmentation. Lecture Notes in Computer Science, 2021, , 420-430.	1.0	2
120	Transductive Multiview Modeling With Interpretable Rules, Matrix Factorization, and Cooperative Learning. IEEE Transactions on Cybernetics, 2022, 52, 11226-11239.	6.2	2
121	Intelligent Diagnostic Methods for Thyroid Nodules. Journal of Medical Imaging and Health Informatics, 2017, 7, 1772-1779.	0.2	2
122	A Virtual Psychiatric Ward for Orientating Patients Admitted for the First Time. Cyberpsychology, Behavior, and Social Networking, 2010, 13, 637-648.	2.1	1
123	Generalized locality preserving Maxiâ€"Min Margin Machine. Neural Networks, 2012, 36, 18-24.	3.3	1
124	Classification of motor imagery tasks using phase synchronization analysis of EEG based on multivariate empirical mode decomposition. , 2014, , .		1
125	A novel privacy-preserving probability transductive classifiers from group probabilities based on regression model. Journal of Intelligent and Fuzzy Systems, 2015, 29, 917-925.	0.8	1
126	Towards Using Tiny Sensors with Heat Balancing Criteria for Child Care Reminders. International Journal of Semantic Computing, 2016, 10, 365-378.	0.4	1

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127	Safety control for impedance haptic interfaces. Multimedia Tools and Applications, 2016, 75, 15795-15819.	2.6	1
128	A Virtual Reality Training System for Helping Disabled Children to Acquire Skills in Activities of Daily Living. Lecture Notes in Computer Science, 2014, , 244-251.	1.0	1
129	Locality Preserving Projections with Adaptive Neighborhood Size. Lecture Notes in Computer Science, 2017, , 223-234.	1.0	1
130	Computer aided diagnostic tool for prostate cancer with rule extraction from Support Vector Machines. , 2018, , .		1
131	Shape Mask Generator: Learning to Refine Shape Priors for Segmenting Overlapping Cervical Cytoplasms. Lecture Notes in Computer Science, 2020, , 639-649.	1.0	1
132	System identification of biological cells by atomic force microscopy. International Journal on Interactive Design and Manufacturing, 0, , 1.	1.3	1
133	Development of a Healthcare Information System for Community Care of Older Adults and Evaluation of Its Acceptance and Usability. Digital Health, 2022, 8, 205520762211090.	0.9	1
134	Noise-benefit FRSDE for speedup of density estimation on large data. Journal of Intelligent and Fuzzy Systems, 2015, 30, 443-450.	0.8	0
135	Nonnegative matrix factorization with manifold regularization and maximum discriminant information. International Journal of Machine Learning and Cybernetics, 2015, 6, 837-846.	2.3	0
136	Enhancing the Performance of Brain-Computer Interface with Haptics. , 2017, , .		0
137	Towards Interactive and Realistic Rendering of 3D Fetal Ultrasound via Photon Mapping. , 2017, , .		0
138	Reliability Learning for Interval Type-2 TSK Fuzzy Logic System with its Application to Medical Diagnosis. , 2019, , .		0
139	Simulation of Soft Deformable Objects for Virtual Reality Medical Applications. Communications in Computer and Information Science, 2007, , 355-364.	0.4	0
140	Correntropy-Based Low-Rank Matrix Factorization With Constraint Graph Learning for Image Clustering. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 10433-10446.	7.2	0